IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	**MAIL STOP** **APPEAL BRIEF - PATENTS**
Takao Koyama	)	Group Art Unit: 3751
Application No.: 10/511,304	)	Examiner: TUAN N NGUYEN
Filed: October 15, 2004	)	Appeal No.: _____
For: WRITING INSTRUMENT	)	

APPEAL BRIEF

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APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated June 9, 2009 finally rejecting claims 21, 37, 51, 53, 55, 57 and 59-61, which are reproduced as the Claims Appendix of this brief.

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The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

I. Real Party in Interest

The present application is assigned to MITSUBISHI PENCIL KABUSHIKI KAISHA. MITSUBISHI PENCIL KABUSHIKI KAISHA is the real party in interest, and is the assignee of Application No. 10/511,304.

II. Related Appeals and Interferences

The Appellant's legal representative, or assignee, does not know of any other appeal or interferences which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

III. Status of Claims

This application was originally filed with Claims 1-20. During prosecution, Claims 21-61 were added, and Claims 1-20 were canceled. Thus, the claims currently pending in this application are Claims 21- 61. Claims 21, 37, 51, 53, 55, 57 and 61 are objected to because of an informality. Claims 22-36, 38-50, 52, 54, 56 and 58 are withdrawn. No claims are allowed.

Claims 21, 37, 51, 53, 55, 57 and 59-61 stand finally rejected. Claims 21, 37, 51, 53, 55, 57 and 59-61 are appealed.

IV. Status of Amendments

An Amendment After Final was filed on September 9, 2009, in response to the Final Rejection mailed June 9, 2009. The claim amendments set forth in the Amendment After Final were not entered.

A further Amendment After Final was filed concurrently herewith on January 7, 2010, to correct the noted informality in claim 21, i.e., "pen" on line 5 should be --pen tip--. Appellants are awaiting notification regarding entry of said claim

amendment. The claims to be appealed as set forth in the Appendix attached hereto include this amendment to claim 21.

V. Summary Claimed Subject Matter

A. The Invention

The writing instrument is equipped with a barrel which is a writing instrument main body, an ink occlusion body, an ink guiding feed, a pen tip and plug 50. The barrel is constituted of, for example, a synthetic resin, and a small diameter part having a taper part at a tip side and a large diameter part are integrated. Adopted is a structure in which a fitting part into which a pen tip is fitted is present in the small diameter part and in which the ink occlusion body impregnated with an ink for a writing instrument and the ink guiding feed are mounted in the inside of the large diameter part .

The tip side of the large diameter part in the barrel has a visible part constituted of a transparent material or a translucent material so that the inside of the barrel can visually be observed, and the other parts are non-visible parts constituted of different materials. The whole part of the barrel may be constituted of a transparent material or a translucent material having visibility so that the whole part of the barrel can visually be observed. Further, the whole part of the barrel 10 may be constituted of a transparent material or a translucent material having visibility, and the other parts than the visible part may be non-visible parts in the form of a colored part and a decorated part.

An overall length of the visible part may be such a length that the ink guiding feed held in the barrel can visually be observed through the visible part. The ink occlusion body is impregnated with an ink for a writing instrument. The ink occlusion body is mounted between a rear holder sealing a front part of the barrel and the plug in the barrel.

The ink guiding feed is a cylindrical (tubular) ink passage member having visibility and constituted of, for example, a transparent material or a translucent material made of a resin, a rubber or glass. A rear end part of the ink guiding feed passes through the rear holder and is inserted into the ink occlusion body, and a front end part passes through a front holder sealing the inside of the small diameter

part in the barrel and is inserted into a rear end part of the pen tip. This allows a visible space part to be formed in the barrel, and the ink guiding feed is held in a central part of the above visible space part by the rear holder sealing the inside of the barrel and the front holder.

The above structure makes it easy to visually observe the ink guiding feed via the visible part in the barrel. The ink impregnated into the ink occlusion body flows in the ink guiding feed by virtue of capillary force and is fed to the pen tip via the above ink guiding feed.

B. Mapping the Independent Claims to the Disclosure

Independent Claim 21 is directed to a writing instrument comprising an ink occlusion body (20 in Figure 1) disposed in a barrel (10 in Figure 1), the ink occlusion body (20 in Figure 1) including a capillary material impregnated with ink (see, Paragraphs [0050]-[0051], Page 12, line 15 - page 13, line 3); a pen tip (40 in Figure 1; Paragraph [0064], Page 18, lines 11-24) including a capillary material disposed in a writing part of the writing instrument, wherein the ink impregnated in the ink occlusion body (20 in Figure 1) is fed to the pen tip (40 in Figure 1) via an ink guiding feed (30 in Figure 1)(see, Paragraph [0056], Page 14, line 18 - Page 15, line 7); wherein ink flows from the capillary material of said occlusion body (20 in Figure 1) by virtue of capillary force and ink flows into the capillary material of said pen tip (40 in Figure 1) by virtue of capillary force, said ink guiding feed lacking any capillary material therewithin (see, Paragraphs [0059] and [0067], Page 16, lines 10-15 and Page 20, lines 1-7); wherein said ink guiding feed (30 in Figure 1) is tubular and disposed within the barrel (10 in Figure 1) between the ink occlusion body (20 in Figure 1) and the pen tip (40 in Figure 1) so as to prevent outside air from flowing in when the ink occlusion body (20 in Figure 1) is impregnated with ink, and allowing outside air to flow into the barrel (10 in Figure 1) as ink in the ink occlusion body (20 in Figure 1) is depleted (see, Paragraphs [0056] -[0058], Page 14, line 18 - Page 16, line 9); and wherein said ink guiding feed (30 in Figure 1) has visibility such that a sign of exhausting the ink fed from the ink occlusion body (20 in Figure 1) to the pen tip (40 in Figure 1) is detected by visually observing the empty ink guiding feed (30 in

Figure 1) via a visible part (12 in Figure 1) formed in the barrel (see, Paragraphs [0068] and [0069], Page 20, lines 8-23).

Claim 59 is directed to a writing instrument comprising a barrel (10 in Figure 1) having a visible portion (12 in Figure 1)(see, Paragraph [0052], Page 13, lines 4-9); an ink occlusion body (20 in Figure 1) disposed in the barrel (10 in Figure 1)(see, Paragraphs [0050]-[0051], Page 12, line 15 - page 13, line 3); a writing part including a pen tip (40 in Figure 1); and an ink guiding feed (30 in Figure 1) defined by a hollow tubular body without any capillary material within the hollow tubular body, and formed of a transparent or translucent material disposed between the ink occlusion body (20 in Figure 1) and the pen tip (40 in Figure 1) in the barrel (see, Figures 1 and 3, Paragraph [0056]; Page 14, line 18 - Page 15, line 7), wherein ink impregnated in the ink occlusion body (20 in Figure 1) is fed to the pen tip (40 in Figure 1) under capillary force via the ink guiding feed (30 in Figure 1) (see, Paragraphs [0059] and [0067], Page 16, lines 10-15 and Page 20, lines 1-7), and a sign of exhausting the ink fed from the ink occlusion body (20 in Figure 1) is detected by visually observing an empty tubular body of the ink guiding feed (30 in Figure 1) through the visible portion (12 in Figure 1) of the barrel (see, Paragraphs [0068] and [0069], Page 20, lines 8-23).

VI. Grounds of Rejection to be Reviewed on Appeal

The rejection of Claims 21, 37, 51, 53, 55, 57 and 59-61 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,065,215 to Otsuka (hereinafter Otsuka) in view of U.S. Patent No. 6,428,235 to Takanashi et al. (hereinafter Takanashi) and U.S. Patent No. 4,979,840 to Madaus et al. (hereinafter Madaus).

VII. Argument

A. Claims 21, 37, 51, 53, 55, 57 and 61 stand rejected under 35 U.S.C. § 103(a) over Otsuka in view of Takanashi et al. and Madaus

Claims 21, 37, 51, 53, 55, 57 and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Otsuka in view of Takanashi and Madaus. These rejections should be reversed for the following reasons.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Office to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine,* 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Office must make the factual determinations set forth in *Graham v. John Deere Co.,* 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting *a prima facie* case of unpatentability." *In re Oetiker,* 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.,* 82 USPQ2d 1385, 1396 (quoting *In re Kahn,* 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

The writing instrument of claim 21 comprises, *inter alia*, an ink occlusion body disposed in a barrel, the ink occlusion body including a capillary material impregnated with ink; a pen tip including a capillary material, wherein the ink impregnated in the ink occlusion body is fed to the pen tip via an ink guiding feed, said ink guiding feed lacking any capillary material therewithin.

The primary reference upon which the Examiner relies, Otsuka, discloses a writing instrument having an ink reservoir 16 including a fibrous block 22. The ink in the reservoir is fed to a nib 24 that is made of a thermoplastic synthetic resin. Col. 2, lines 34-36. The rear end 24b of the nib 24 is inserted into the ink reservoir 16 and the nib 24 has an inner capillary conduit 28 through which ink is introduced from the ink reservoir 16.

In rejecting the claims over Otsuka, the Examiner contends that the capillary conduit 28 corresponds to the ink guiding feed recited in claims 21 and 59. However, the capillary conduit 28 of Otsuka has a capillary force for drawing ink from the reservoir, whereas the recited ink guiding feed lacks any capillary material within.

Still further, the nib 24 of Otsuka, allegedly corresponding to the claimed pen tip, is formed of a thermoplastic synthetic resin and no mention is made of its capillary ability, whereas the recited pen tip includes a capillary material. More specifically, as recited in claim 21, "ink flows from the capillary material of said occlusion body by virtue of capillary force and ink flows into the capillary material of said pen tip by virtue of capillary force, said ink guiding feed lacking any capillary material therewithin." Emphasis added. Hence, Appellants respectfully submit that Otsuka does not disclose or suggest an ink guiding feed lacking any capillary material therewithin as recited in claim 21.

Hence, Appellants respectfully submit that Otsuka does not disclose or suggest capillary material of a pen tip or an ink guiding feed lacking any capillary material therewithin as recited in claim 21.

The secondary reference relied upon by the Examiner, Takanashi, is directed to a writing implement having a barrel cylinder 12, a holder 14 holding a pen core, an ink tank 16 for storing liquid ink to be supplied to pen core 10 and a collector 18 for temporarily retaining the ink. Col. 7, lines 33-41. Fitted to the inner peripheral portion of collector 18 is a intermediary core 24 made up of a compressed fabric element. Col. 7, lines 59-61. The collector 18, barrel cylinder 12 and ink tank 16 are formed of transparent materials. Col. 8, lines 11-15. Thus, ink is guided from the ink tank 16 to the pen core by way of the collector 18 having an intermediary core 24 of compressed fabric. As should be readily apparent, Takanashi also fails to disclose an ink guiding feed lacking any capillary material therewithin as recited in claim 21.

Still further, the Examiner relies upon Madaus for its disclosure of a transparent window in an outer cap member, however, Madaus does not cure the deficiencies of Otsuka and Takanashi with respect to the invention recited in Claim 21.

Given the above differences in structure, even if the barrel of Otsuka were made from a transparent material, as proposed by the Examiner when combining the same with Takanashi and Madaus, the user would only be observing the nib 24 which obtains a permanent tint from use with the ink and thus there would be no indication of the actual residual ink quantity. That is, since the capillary conduit 28 is disposed within the permanently ink tinted nib 24 -- the capillary conduit 28 is never clearly visible. Accordingly, the limitations of claim 21 that the "ink guiding feed has

visibility" is not met. As described in the specification, Paragraph [0069] of the published application and Page 20, lines 16-23 of the application as filed, one of the goals of the claimed invention is to allow one to clearly and easily determine from visual observation of the ink guiding feed whether or not starving at the pen tip is caused by drying at the pen tip, or alternatively, by substantial exhaustion of the ink due to consumption. The modification proposed by the Examiner would not meet this objective. Accordingly, Appellants submit the claimed invention is not rendered obvious by the cited references.

B. Claims 59 and 60 stand rejected under 35 U.S.C. § 103(a) over Otsuka in view of Takanashi et al. and Madaus

Claims 59 and 60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Otsuka in view of Takanashi and Madaus. These rejections should be reversed for the following reasons.

The writing instrument of claim 59 comprises a writing instrument comprises, *inter alia*, a barrel; an ink occlusion body, a writing part including a pen tip; and an ink guiding feed defined by a hollow tubular body without any capillary material within the hollow tubular body, wherein ink impregnated in the ink occlusion body is fed to the pen tip under capillary force via the ink guiding feed.

In rejecting the claims over Otsuka, the Examiner contends that the capillary conduit 28 corresponds to the ink guiding feed recited in claim 59. However, the capillary conduit 28 of Otsuka has a capillary force for drawing ink from the reservoir, whereas the recited ink guiding feed lacks any capillary material within the hollow tubular body.

Hence, Appellants respectfully submit that Otsuka does not disclose or suggest an ink guiding feed defined by a hollow tubular body lacking any capillary material as recited in claim 59.

The secondary reference relied upon by the Examiner, Takanashi, is directed to a writing implement having a barrel cylinder 12, a holder 14 holding a pen core, an ink tank 16 for storing liquid ink to be supplied to pen core 10 and a collector 18 for temporarily retaining the ink. Col. 7, lines 33-41. Fitted to the inner peripheral portion of collector 18 is a intermediary core 24 made up of a compressed fabric

element. Col. 7, lines 59-61. The collector 18, barrel cylinder 12 and ink tank 16 are formed of transparent materials. Col. 8, lines 11-15. Thus, ink is guided from the ink tank 16 to the pen core by way of the collector 18 having an intermediary core 24 of compressed fabric. As should be readily apparent, Takanashi also fails to disclose an ink guiding feed defined by a hollow tubular body lacking any capillary material as recited in claim 59.

Still further, the Examiner relies upon Madaus for its disclosure of a transparent window in an outer cap member, however, Madaus does not cure the deficiencies of Otsuka and Takanashi with respect to the invention recited in Claim 59.

Accordingly, Appellants submit the claimed invention is not rendered obvious by the cited references.

VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

IX. Evidence Appendix

See attached Evidence Appendix for copies of evidence relied upon by Appellant.

X. Related Proceedings Appendix

See attached Related Proceedings Appendix for copies of decisions identified in Section II, supra.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date January 7, 2010

By: /WLWeinstein/
Wendi L. Weinstein
Registration No. 34456

Customer No. 21839
703 836 6620

VIII. CLAIMS APPENDIX

The Appealed Claims

21. (Previously Presented) A writing instrument comprising:

an ink occlusion body disposed in a barrel, the ink occlusion body including a capillary material impregnated with ink;

a pen tip including a capillary material disposed in a writing part of the writing instrument, wherein the ink impregnated in the ink occlusion body is fed to the pen tip via an ink guiding feed;

wherein ink flows from the capillary material of said occlusion body by virtue of capillary force and ink flows into the capillary material of said pen tip by virtue of capillary force, said ink guiding feed lacking any capillary material therewithin;

wherein said ink guiding feed is tubular and disposed within the barrel between the ink occlusion body and the pen tip so as to prevent outside air from flowing in when the ink occlusion body is impregnated with ink, and allowing outside air to flow into the barrel as ink in the ink occlusion body is depleted; and

wherein said ink guiding feed has visibility such that a sign of exhausting the ink fed from the ink occlusion body to the pen tip is detected by visually observing the empty ink guiding feed via a visible part formed in the barrel.

37. (Previously Presented) The writing instrument as described in claim 21, wherein a surface of the ink guiding feed which is brought into contact with the ink is formed of a material or the ink guiding feed itself is formed of a material having a smaller surface tension than that of the ink.

51. (Previously Presented) The writing instrument as described in claim 21, wherein the visible part in the barrel has a length of 1 mm or more and not longer than an overall length of the writing instrument.

53. (Previously Presented) The writing instrument as described in claim 21, wherein the ink guiding feed has an ink passage cross-sectional area of 8×10^{-2} to 80 mm^2.

55. (Previously Presented) The writing instrument as described in claim 21, wherein the ink has a surface tension of 18 mN/ or more at 25℃.

57. (Previously Presented) The writing instrument as described in claim 21, wherein the ink has a viscosity of 500 mPa·s or less at 25℃.

59. (Previously Presented) A writing instrument comprising:

a barrel having a visible portion;

an ink occlusion body disposed in the barrel;

a writing part including a pen tip; and

an ink guiding feed defined by a hollow tubular body without any capillary material within the hollow tubular body, and formed of a transparent or translucent material disposed between the ink occlusion body and the pen tip in the barrel;

wherein ink impregnated in the ink occlusion body is fed to the pen tip under capillary force via the ink guiding feed, and a sign of exhausting the ink fed from the ink occlusion body is detected by visually observing an empty tubular body of the ink guiding feed through the visible portion of the barrel.

60. (Previously Presented) The writing instrument as described in claim 59, wherein the visible portion of said barrel generally corresponds at least to a location of said ink guiding feed within said barrel, said barrel further including a non-visible portion generally corresponding to a location of at least one of said writing part and said ink occlusion body.

61. (Previously Presented) The writing instrument as described in claim 21, wherein the ink guiding feed is a hollow tube having a front end part, a rear end part, and an intermediate part therebetween, the rear end part of the ink guiding feed being disposed within the ink occlusion body, the front end part of the ink guiding feed being inserted into a rear end part of the pen tip, and the intermediate part being visible via the visible part formed in the barrel.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.